

91-088292/13

A60 E23 F06 (E21)

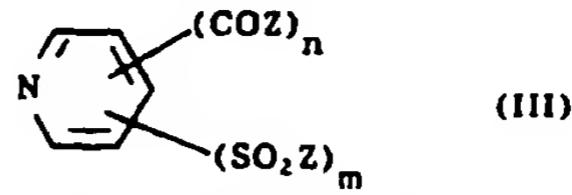
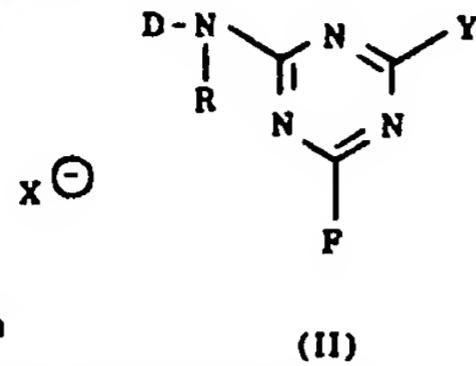
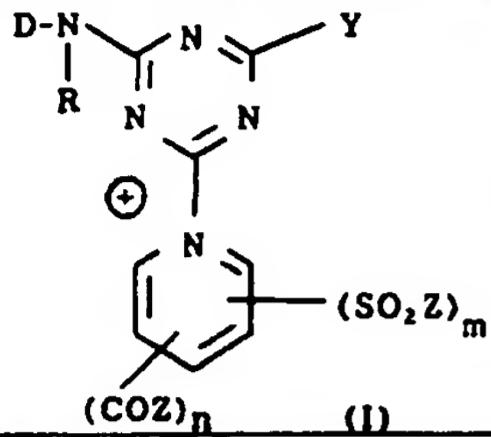
BAYER AG

16.09.89-DE-930996 (27.03.91) C09b-62/04

PARK 16.09.89  
\*EP -418-623-AA(3-A5, 5-F1D, 8-E3, 12-S5H) E(21-D1, 21-D8, 25) F(3-F3,  
3-F6, 3-F19, 3-F22)

Reactive dyestuff prodn. by introducing cationic pyridino gp - into  
s-triazinyl-amino dyestuff cpd. for dyeing and printing e.g. cotton  
and polyamide  
C91-037486 R(CH DE FR GB LI)

Prodn. of reactive dyestuffs of formula (I) having a  
cationic 4-pyridino-s-triazin-2-yl-amino substit. involves  
reacting a 4-fluoro-s-triazin-2-yl-amino-substd. dyestuff of  
formula (II) with a pyridine cpd. of formula (III) in the  
presence of an acid-binding agent (IV).



D = the radical of inorganic chromophore;

R = H or 1-4C alkyl;

n and m = 0, 1 or 2 with m + n = max. 2;

Y = a substit. which is not fibre-reactive;

Z = OH, OR1, NR2R, or OM;

M = an alkali(ne earth) metal, esp. Li, Na or K;

X- = the anion of a mono- or polybasic (in)org. acid;

R1 = opt. subst. 1-4C alkyl;

R2 and R3 = H or R1; or NR2R, = a 5- or 6-membered  
heterocycle.**USE/ADVANTAGE**

(I) are useful for dyeing and printing natural and  
synthetic materials contg. OH or amide gps., esp. cellulose  
and polyamides. They are esp. suitable for dyeing

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cellulose materials by the exhaustion and stop padding cold  
dwell technique and for printing cotton and staple rayon.  
Good build-up, high fixing yields and good fastness, esp.  
wet fastness, are obtd.

**ALSO CLAIMED**

The claims also cover aq. solns. with pH 4-9, pref. 6-8,  
contg. 2-50 esp. 5-30 (wt.)% (I), 0-1, pref. 0-0.5% inorg.  
neutral salt, 0-40% water-miscible org. solvent (V) and opt.  
other conventional additives (VI), e.g. buffers.

**PREFERRED CONDITIONS**

Reaction is carried out in aq. or aq.-org. medium at  
40-140, pref. 80-90°C and pH 4-10, pref. 6-8. The aq. (I)  
solns. are prep'd. by reacting (II), opt. in the form of aq.  
solns. or dispersions obtd. by coupling or condensation,  
with (III) in aq. or aq.-org. medium, followed by pressure  
permeation. (V) and opt. (VI) may be added before, during  
or after permeation.

**EXAMPLE**

71.8 g 2-(3-(3-carboxy-5-hydroxy-1-(4-sulphophenyl)-  
pyrazol-4-yl-azo)-4-sulpho-anilino)-6-(N-methyl-β-sulpho-  
ethylamino)-4-fluoro-s-triazine stirred in 250 ml water,  
adjusted to pH 7.5 with soda soln., treated with 12.9 g  
nicotinic acid and reacted at 80-85°C and pH 7.5, giving 350

ml dyestuff soln. This was desalinated and conc. by  
pressure permeation, using a synthetic polymer membrane  
with a cut-off level of 1000. 180 g conc. dyestuff soln.  
were obtd. The soln. was treated with 2 g NaH2PO4, 2g  
Na2HPO4 and 6 g ε-caprolactam and made up to 200 ml  
with deionised water. (18pp016MBDwgNo0/0).  
(G) ISR: DE2634308 J61040367

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